substrate carrier which is arranged to be drivingly rotatable about a second axis, wherein said first and said second axes are oblique with respect to one another at an angle of less than 90°, and said sputtering source is a magnetron sputtering source with at least one toroidal magnetic field around said first axis with symmetric field polarity as viewed in a cutting plane through said new sputter surface, which cutting plane contains said first axis.

47. (Amended) The chamber of claim 35, wherein said new sputter surface is substantially rotationally symmetrical with respect to said first axis and has a diameter Φ_T and wherein a locus of smallest mutual spacing of said first and of said second axes has a distance D to said new sputter surface and wherein $3/4 \leq \Phi_T / D \leq 2$.

48. (Amended) The chamber of claim 47, wherein Φ_T equals approximately 1.2 D.

50. (Amended) The chamber of claim 49, further comprising at least one of said substrate on said receiving surface, said locus being situated at least approximately on a plane defined by a surface of said at least one substrate to be sputter coated.

58. (Amended) A method for manufacturing coated workpieces comprising the steps of

introducing a workpiece into a sputtering chamber,

rotating said workpiece about a rotational axis,

providing a sputtering source with a sputtering surface and having a central axis which is oblique with respect to said rotational axis at an angle of less than 90°,

sputter coating said workpiece by said source thereby providing at said source at least one toroidal magnetic field with a symmetric field-polarity considered in a cutting plane through said sputter source, which cutting plane contains said normal axis.